MISSOURI DEPARTMENT OF NATURAL RESOURCES
ENERGY CENTER - ENERGY LOAN PROGRAM

PROGRAMMABLE SETBACK THERMOSTAT WORKSHEET

BUILDING	LOCATION	DATE

To estimate the savings possible from a temperature reduction or night setback, the following information must be known:

The existing weekly operating hours when occupied.
The existing weekly operating hours when unoccupied.
The proposed weekly operating hours when occupied.
The proposed weekly operating hours when unoccupied.
The annual heating cost.
The existing weekly operating temperature when occupied.
The existing weekly operating temperature when unoccupied.
The proposed weekly operating temperature when occupied.
The proposed weekly operating temperature when unoccupied.

SAVINGS ESTIMATE

1.	Enter the existing weekly operating hours when occupied	_____
2.	Enter the existing weekly operating temperature when occupied	_____
3.	Multiply line 1 by line 2	_____
4.	Enter the existing weekly operating hours when unoccupied	_____
5.	Enter the existing weekly operating temperature when unoccupied	_____
6.	Multiply line 4 by line 5	_____
7.	Add line 3 to line 6	_____
8.	Enter the proposed weekly operating hours when occupied	_____
9.	Enter the proposed weekly operating temperature when occupied	_____
10.	Multiply line 8 by line 9	_____
11.	Enter the proposed weekly operating hours when unoccupied	_____
12.	Enter the proposed weekly operating temperature when unoccupied	_____
13.	Multiply line 11 by line 12	_____
14.	Add line 10 to line 13	_____
15.	Subtract line 14 from line 7	_____
16.	Multiply 0.0002 by line 15	_____

If the heating energy source is not used for any other purposes and the cost for heating the building is known, then skip lines 17 through 20 and enter the value on line 21. If the energy source supplies heating as well as other needs of the building, proceed with line 17.

17.	Total the seven energy bills that heating is included in from October through April and enter that amount	$ _____
18.	Enter the amount of the May energy bill that heating is included in	$ _____
19.	Multiply 7.0 by line 18 $ _____	
20.	Subtract line 19 from line 17 and ENTER THIS VALUE ON LINE 21 BELOW.	
21.	ANNUAL HEATING COST $ _____	

ANNUAL SAVINGS

22. Multiply line 16 by line 21 $ _____ /year

PROJECT COST

23. Enter the total cost for the proposed project including material, labor and design $ _____

SIMPLE PAYBACK

24. Divide line 23 by line 22 _____ years